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 51.(New) The method of claim 25, wherein the controlled environment further comprises a liquid, and the method further comprises altering a first property of the environment such that at least a portion of the liquid evaporates into the atmosphere.

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Remarks

As a preliminary matter, Applicants thank the Examiner for extending their attorney, Allison Johnson, the courtesy of an interview on December 18, 2002. During the interview the Examiner indicated that the above-amendments appear to overcome the art of record.

Applicants also thank the Examiner for kindly indicating that claims 26-30 are allowable and that claims 5, 6, 8, and 18-21 would be allowable if rewritten in independent form.

Claims 1, 18, 25, 31 and 33 have been amended. New claims 34-51 have been added. Claim 2 has been cancelled. A clean version of the amended and new claims is attached at Tab 1. A marked-up version of the amended and new claims is attached at Tab 2. Claims 18, 25 and 31 have been amended to correct clerical and typographical errors and not for reasons related to patentability. Support for the amendments to claims 1 and 33, and new claims 34-51 can be found in general throughout Applicants' Specification and in particular for example as follows: claims 1 and 33, original claim 2 and page 3, lines 14-15; claim 34, original claim 31; claim 35, original claims 29 and 33 and page 3, lines 18-19; claims 36-51, original claims 2-6 and 8-17.

New claim 34 is claim 31 rewritten in independent form. There being no outstanding rejections pertaining to claim 34, Applicants respectfully request an indication that claim 34 is allowable.

Applicants submit that claim 25, which now recites "a liquid of a controlled environment," satisfies the criteria of 35 U.S.C. § 112, second paragraph. As such, Applicants request that the rejection of claim 25 under 35 U.S.C. § 112, second paragraph, be withdrawn. There being no outstanding rejections pertaining to claim 25, Applicants respectfully request an indication that claim 25 is allowable.

The amendments to claims 1 and 33, which incorporate the language of claim 2, (i.e., "the electret exhibits a persistent electric charge") render moot the rejection of

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claims 1, 3, 4, 7, 10, 11 and 33 under 35 U.S.C. § 103 over Sidles et al. (U.S. 4,351,789) in view of Agostini et al. (U.S. 6,172,137). Accordingly, Applicants request that the rejection of claims 1, 3, 4, 7, 10, 11 and 33 under 35 U.S.C. § 103 over Sidles et al. in view of Agostini et al. be withdrawn.

Claims 1-4, 7, 12, 14-17, 22, 32 and 33 stand rejected under 35 U.S.C. § 103 over Popov et al. (Russian Document No. 423483) in view of Angadjivand et al. (U.S. 5,496,507).

Popov et al. disclose passing liquid vapor through a cloth followed by removal of liquid vapor with blowing air. In the Examples, Popov et al. describe passing air saturated with vapors of isopropyl alcohol, methanamide [sic], ethyl alcohol or dimethylformamide through a layer of polypropylene or polyamide filaments and removing the "condensed" [sic] liquid by blowing clean air through the layer.

Claim 1, is directed to a method of making an electret that includes condensing vapor from the atmosphere of a controlled environment onto a dielectric article disposed in the controlled environment. Neither Popov et al. nor Angadjivand et al. nor any combination thereof teaches or suggests condensing vapor from the atmosphere of a controlled environment onto a dielectric article disposed in the controlled environment. The April 3, 2002 Office action states, "[T]he simple fact that Popov et al. teach that air can be flowed through the 'environment' is sufficient to render the environment of Popov et al. a 'controlled environment' (i.e., a surrounding whose pressure can be altered in a predetermined manner)" (April 3<sup>rd</sup> Office action, page 4). Based on the above-quoted passage, Applicants understand the April 3<sup>rd</sup> Office action to take the position that air flowing through an environment inherently alters the pressure of that environment. When relying upon a theory of inherency, an Office Action must set forth a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Stanley B. Levy, 17 U.S.P.Q.2D (BNA) 1461 (Bd. Pat. Appeals and Int. 1990) citing In re King, 801 F.2d 1324, 231 U.S.P.Q. 136 (Fed. Cir. 1986). The April 3<sup>rd</sup> Office action provides no basis in fact or technical reasoning supporting the above-quoted passage. Moreover, it is not the case that air flowing through a space necessarily alters the pressure of the environment in which that space exists. To the contrary, the pressure

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of an environment can remain constant while air travels through it. Popov et al. do not provide any indication that the air traveling through the layer of filaments alters the pressure in the environment in which the layer of filaments is disposed. Popov et al. also do not provide any other information about the environment in which the Examples are carried out. Thus, it has not been established that air flowing through the environment of Popov et al. necessarily alters the pressure of that environment. Therefore, Popov et al. do not expressly or inherently teach a controlled environment –let alone a dielectric article disposed in a controlled environment. Applicants submit, therefore, that the rejection of claim 1 under 35 U.S.C. § 103 over Popov et al. in view of Angadjivand et al. has been overcome and request that it be withdrawn.

Applicants further note that nothing in the April 3rd Office action or Popov et al. evidences that the alleged inherent property of the Popov et al. method, i.e., a controlled environment, was known. It is well established by legal precedent that an obviousness rejection cannot be predicated on that which is unknown. In re Spormann, 53 C.C.P.A. 1375, 363 F.2d 444, 448, 150 U.S.P.Q. 449, 452 (CCPA 1966). Accordingly, it is improper to base the obviousness rejection of claim 1 on an alleged inherent property of the method of Popov et al. Thus, the basis for rejection of claim 1 under 35 U.S.C. § 103 over Popov et al. in view of Angadjivand et al. is not sound. For at least this additional reason, the rejection of claim 1 under 35 U.S.C. § 103 over Popov et al. in view of Angadjivand et al. cannot stand.

Claims 10, 11, and 13 stand rejected under 35 U.S.C. § 103 over Popov et al. in view of Angadjivand et al. and further in view of Coufal et al. The secondary reference of Coufal et al. does not cure the deficiencies of Popov et al. and Angadjivand et al. Applicants submit, therefore, that the rejection of claims 10, 11 and 13 under 35 U.S.C. § 103 over Popov et al. in view of Angadjivand et al. and further in view of Coufal et al. has been overcome and request that it be withdrawn.

Claims 1, 3, 4, 7, 9-11, 14-17, 22, 32 and 33 stand rejected under 35 U.S.C. § 103 over Angadjivand et al. in view of Pike et al. (U.S. 5,759,926).

Neither Angadjivand et al. nor Pike et al. teach or suggest condensing vapor from the atmosphere of a controlled environment onto a dielectric article disposed in the controlled environment. In particular, nothing in Angadjivand et al. or Pike et al. teaches

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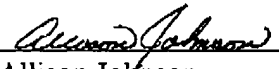
or suggests a surrounding whose volume, temperature or pressure or a combination thereof can be altered in a predetermined manner. Accordingly, Applicants submit that the rejection of claims 1, 3, 4, 7, 9-11, 14-17, 22, and 33 under 35 U.S.C. § 103 over Angadjivand et al. in view of Pike et al. has been overcome and request that the rejection be withdrawn. Should this rejection be maintained, Applicants respectfully request that the Office action identify, by column and line number, where in Angadjivand et al. or Pike et al. there is a teaching of a controlled environment. Applicants further note that to the extent the rejection relies on an assumption that a controlled environment is inherently present (as opposed to expressly taught) in one or more of the cited references, inherency is an improper basis on which to predicate an obviousness rejection. See In re Spormann, 53 C.C.P.A. 1375, 363 F.2d 444, 448, 150 U.S.P.Q. 449, 452 (CCPA 1966).

The claims now pending in the application are in condition for allowance and such action is respectfully requested. The Examiner is invited to telephone the undersigned should a teleconference interview facilitate prosecution of this application.

Please charge any additional fees owing or credit any over payments made to Deposit Account No. 501,171.

Respectfully submitted,

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## **TAB 1**

**CLEAN VERSION OF THE AMENDED AND NEW CLAIMS**

1. A method of making an electret comprising:  
condensing vapor from the atmosphere of a controlled environment onto a dielectric article to form a condensate thereon, said dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm and being disposed in said controlled environment; and  
drying the article to remove the condensate,  
wherein the electret exhibits a persistent electric charge.
18. The method of claim 1, wherein the controlled environment further comprises a liquid, and the method further comprises  
altering a first property of the environment such that at least a portion of the liquid evaporates into the atmosphere; and  
altering a second property of the environment such that the vapor condenses on the surface of the article.
25. A method of making an electret, which method comprises:  
placing a dielectric article in a liquid of a controlled environment;  
condensing vapor from the atmosphere of the controlled environment onto the dielectric article to form a condensate thereon;  
decreasing the pressure on the atmosphere of the controlled environment such that at least a portion of the liquid evaporates into the atmosphere; and then  
drying the article.
31. The method of claim 29, wherein the first property comprises volume and the second property comprises volume.
33. A method of making an electret comprising:  
altering at least one property of a controlled environment so as to cause the vapor of the atmosphere of the controlled environment to condense on a

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dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm, said dielectric article being disposed in said controlled environment; and  
drying the article to remove the condensate,  
wherein the electret exhibits a persistent electric charge.

34. A method of making an electret, which method comprises:  
altering the volume of a controlled environment that comprises atmosphere and liquid such that at least a portion of the liquid evaporates into the atmosphere to form vapor;  
altering the volume of the environment such that the vapor condenses on the surface of a dielectric article; and then  
drying the article.

35. A method of making an electret comprising:  
altering at least one property of a controlled environment so as to cause the vapor of the atmosphere of the controlled environment to condense on a dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm, said property being selected from the group consisting of volume, pressure or temperature of the controlled environment; and  
drying the article.

36. The method of claim 25, wherein the electret exhibits a persistent electric charge.

37. The method of claim 25, wherein the dielectric article comprises a nonconductive polymeric material.

38. The method of claim 25, wherein the condensate that forms when the vapor condenses on the dielectric article includes a polar liquid.

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39. The method of claim 25, wherein the controlled environment further comprises a liquid, and the method further comprises:
- placing the article in the liquid; and
  - decreasing the pressure on the atmosphere such that at least a portion of the liquid evaporates into the atmosphere.
40. The method of claim 25, wherein altering the property comprises increasing the pressure on the atmosphere such that the vapor condenses on the article.
41. The method of claim 25, wherein said altering comprises an adiabatic expansion.
42. The method of claim 25, wherein the controlled environment comprises a vacuum chamber.
43. The method of claim 38, wherein the polar liquid is an aqueous liquid.
44. The method of claim 38, wherein the condensate consists essentially of water.
45. The method of claim 38, wherein the condensate is selected from the group consisting of acetone, methanol, ethanol, liquid carbon dioxide, butanol, or a combination thereof.
46. The method of claim 38, wherein the condensate comprises a fluorocarbon.
47. The method of claim 38, wherein the article is nonwoven fibrous web.
48. The method of claim 47, wherein the nonwoven fibrous web comprises microfibers.



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49. The method of claim 48, wherein the microfibers are melt blown.

50. The method of claim 49, wherein the melt blown microfibers comprise polypropylene, poly-(4-methyl-1-pentene), or a combination thereof.

51. The method of claim 25, wherein the controlled environment further comprises a liquid, and the method further comprises altering a first property of the environment such that at least a portion of the liquid evaporates into the atmosphere.

## **TAB 2**

**MARKED-UP VERSION OF THE AMENDED AND NEW CLAIMS**

1.(Amended) A method of making an electret comprising:

condensing vapor from the atmosphere of a controlled environment onto a dielectric article to form a condensate thereon, said dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm and being disposed in said controlled environment; and drying the article to remove the condensate, wherein the electret exhibits a persistent electric charge.

18.(Amended) The method of claim 1, wherein the controlled environment further comprises a liquid, and the method further comprises

altering a first property of the environment such that at least a portion of the liquid evaporates into the atmosphere; and

altering a second property of the environment such that the vapor condenses on the surface of the article.

25.(Amended) A method of making an electret, which method comprises:

placing a dielectric article in a [the] liquid of a controlled environment;

condensing vapor from the atmosphere of the controlled environment onto the dielectric article to form a condensate thereon;

decreasing the pressure on the atmosphere of the [said] controlled environment such that at least a portion of the liquid evaporates into the atmosphere; and then

drying the article.

31.(Amended) The method of claim 29, wherein the first property comprises [volumen] volume and the second property comprises volume.

33.(Amended) A method of making an electret comprising:

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altering at least one property of a controlled environment so as to cause the vapor of the atmosphere of the controlled environment to condense on a dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm, said dielectric article being disposed in said controlled environment; and  
drying the article to remove the condensate,  
wherein the electret exhibits a persistent electric charge.

Please add the following claims.

34.(New) A method of making an electret, which method comprises:  
altering the volume of a controlled environment that comprises atmosphere and liquid such that at least a portion of the liquid evaporates into the atmosphere to form vapor;  
altering the volume of the environment such that the vapor condenses on the surface of a dielectric article; and then  
drying the article.

35.(New) A method of making an electret comprising:  
altering at least one property of a controlled environment so as to cause the vapor of the atmosphere of the controlled environment to condense on a dielectric article having a resistivity of greater than  $10^{14}$  ohms-cm, said property being selected from the group consisting of volume, pressure or temperature of the controlled environment; and  
drying the article.

36.(New) The method of claim 25, wherein the electret exhibits a persistent electric charge.

37.(New) The method of claim 25, wherein the dielectric article comprises a nonconductive polymeric material.

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38.(New) The method of claim 25, wherein the condensate that forms when the vapor condenses on the dielectric article includes a polar liquid.

39.(New) The method of claim 25, wherein the controlled environment further comprises a liquid, and the method further comprises:  
placing the article in the liquid; and  
decreasing the pressure on the atmosphere such that at least a portion of the liquid evaporates into the atmosphere.

40.(New) The method of claim 25, wherein altering the property comprises increasing the pressure on the atmosphere such that the vapor condenses on the article.

41.(New) The method of claim 25, wherein said altering comprises an adiabatic expansion.

42.(New) The method of claim 25, wherein the controlled environment comprises a vacuum chamber.

43.(New) The method of claim 38, wherein the polar liquid is an aqueous liquid.

44.(New) The method of claim 38, wherein the condensate consists essentially of water.

45.(New) The method of claim 38, wherein the condensate is selected from the group consisting of acetone, methanol, ethanol, liquid carbon dioxide, butanol, or a combination thereof.

46.(New) The method of claim 38, wherein the condensate comprises a fluorocarbon.

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47.(New) The method of claim 38, wherein the article is nonwoven fibrous web.

48.(New) The method of claim 47, wherein the nonwoven fibrous web comprises microfibers.

49.(New) The method of claim 48, wherein the microfibers are melt blown.

50.(New) The method of claim 49, wherein the melt blown microfibers comprise polypropylene, poly-(4-methyl-1-pentene), or a combination thereof.

51.(New) The method of claim 25, wherein the controlled environment further comprises a liquid, and the method further comprises altering a first property of the environment such that at least a portion of the liquid evaporates into the atmosphere.